

A WESTERN RACE OF LANGURIA MOZARDI

(Coleoptera: Languriidae)

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Examination of 114 specimens of *Languria mozardi* (Latreille), the Clover Stem-Borer, from various parts of Texas, Arizona, Utah, and northern Mexico, shows that in this area there is a race with the legs consistently darker than the *mozardi* of northeastern and southeastern United States. It is proposed to name it

Languria mozardi occidentalis Vaurie, new subspecies

Similar to *m. mozardi* in size and in coloration above, but differing from it in coloration below, *occidentalis* having more piceous on the femora and less piceous on the abdomen.

Type Locality: UVALDE, TEXAS, June 14, 1932, J. O. Martin, collector; type deposited in the California Academy of Sciences. 36 *paratopotypes*, 33 in the California Academy of Sciences, 3 in the American Museum of Natural History. 81 *paratypes* from: UTAH: St. George (Chas. Palm). ARIZONA: Phoenix, February 28, 1929 (J. H. O'Dell), August (D. K. Duncan), (Chas. Palm), June 24, July 4, 1942 (P. C. Grossman); Tempe, August 1 and 3, 1917, Corn. Univ. Exped. Lot 542; Globe, June (D. K. Duncan), February 23, 1936 (Parker), May 19 (Duncan and Parker); Tucson, Univ. Farm, June 4, 1926 (A. A. Nichol); Pima Co., September 1, 1925 (C. L. Marsh); Yuma, May 14, 1939 (Van Dyke Coll.); Maricopa Co., August 27, 1928 (O. L. B.); "Ariz." (Chas. Palm). TEXAS: Clifton, June 16, 1929 (J. O. Martin); Waco (Schff. Coll.); Austin, April 7, 1924 (J. O. Martin), May 30, 1897 (G. W. Beck); New Braunfels, June 26, 1917 (Schff. Coll.); San Antonio, May (A. Fenyes Coll.), June, 1942 (E. S. Ross); Carrizo Spgs., June 12, 1932 (J. O. Martin); Ben Bolt, June 23, 1930 (J. O. Martin); Kingsville, Corn. Univ. Lot 912 Sub (C. T. Reed); Fedor, (Van Dyke Coll.); "Tex." (Schff. Coll.), (Chas. Palm). MEXICO: Chihuahua: Delicias, July 11, 1947, D. Rockefeller Exp. (Cazier); Sinaloa: Los Mochis, June 18, 1922 (Van Dyke Coll.). 29 *paratypes* in the California Academy of Sciences, 21 in the American Museum of Natural History, 13 at Cornell University and 18 in the collection of Frank H. Parker.

Discussion: In *occidentalis* the middle and hind femora are usually entirely piceous and always more than half piceous, in contrast to *mozardi* where they are usually less than half piceous or half piceous and half reddish yellow. This is a small but constant difference and is shown below.

Table 1. Color of the middle and hind femora of *Languria m. occidentalis* and *L. m. mozardi*:

	114 <i>L. m.</i> <i>occidentalis</i>	196 <i>L. m.</i> <i>mozardi</i>
More than half piceous	109 (96%)	21 (11%)
Half piceous	5 (4%)	110 (56%)
Less than half piceous	—	65 (33%)

The front femora in both races are at least half piceous, but they are usually entirely so in *occidentalis* and from half to three-quarters in *mozardi*.

On the abdomen, the three apical segments are entirely piceous in 280 of 299 *mozardi* specimens, or 93 per cent, and in another series, 152 of 170, or 89 per cent, have them piceous. In *occidentalis*, on the other hand, of 114 specimens, only 43, or 37 per cent, have these segments fully piceous; the same number (37 per cent) have but two apical segments piceous, leaving 29 individuals, or 26 per cent, more or less in between, with only part of the third apical segment piceous.

It seemed that, in general, the elytral punctuation was deeper and larger in *occidentalis* and the head and thorax more strongly punctate, but these characters were found to vary quite a bit in both populations and to be very difficult to assess objectively.

There are physiological and ecological differences between these races. Southwestern *mozardi* (*occidentalis*) has three distinct generations a year, the first passed almost exclusively on yellow sweet clover (*Melilotus officinalis*), the second and third usually on alfalfa (*Medicago sativa*), while in the east there is but one generation, usually passed on red clover (*Trifolium pratense*), but also on other host plants, mainly Compositae.

No specimens have been examined from New Mexico, Colorado, Nevada, California, or Lower California, but it is probable that individuals from these states would be *occidentalis* rather than *mozardi*.